Table 12.7b Emissions From Energy Consumption for Electricity Generation and Useful Thermal Output: Electric Power Sector, 1989-2008 (Subset of Table 12.7a; Thousand Metric Tons of Gas)

	Carbon Dioxide [1]						Sulfur Dioxide					Nitrogen Oxides				
Year	Coal [2]	Natural Gas [3]	Petroleum [4]	Geo-thermal [5]	Non-Biomass Waste [6]	Total	Coal [2]	Natural Gas [3]	Petroleum [4]	Other [7]	Total	Coal [2]	Natural Gas [3]	Petroleum [4]	Other [7]	Total
1989	R1,516,150	R169,649	R133,535	R363	R4,362	R1,824,060	13,815	1	810	7	14,633	7,055	390	246	25	7,717
1990	R1,529,951	R177,227	R101,791	R384	R5,792	R1,815,145	13,576	1	628	13	14,218	6,878	390	175	36	7,480
1991	R1,530,339	R180,537	R95,143	R398	R7,202	R1,813,619	13,590	1	621	15	14,227	6,886	384	165	42	7,476
1992	R1,552,442	R187,725	R79,149	R400	R8,471	R1,828,188	13,375	1	559	12	13,946	6,749	359	128	46	7,282
1993	R1,621,465	R188,286	R90,407	R415	R8,574	R1,909,148	13,133	1	735	13	13,882	6,996	357	143	49	7,544
1994	R1,629,449	R211,149	R85,009	R384	R9,309	R1,935,299	12,695	1	665	11	13,373	6,777	390	128	47	7,343
1995	R1,651,892	R228,675	R61,064	R329	R10,009	R1,951,968	10,573	1	581	34	11,189	4,974	402	282	95	5,754
1996	R1,742,763	R205,250	R66,117	R360	R9,929	R2,024,418	11,129	1	617	32	11,779	5,144	326	301	96	5,866
1997	R1,789,204	R220,174	R75,119	R374	R10,332	R2,095,203	11,515	1	653	36	12,205	5,157	370	269	98	5,894
1998	R1,819,497	R249,836	R105,638	R375	R10,165	R2,185,511	R11,373	1	911	37	12,321	4,965	431	337	103	5,836
1999	R1,826,026	R262,455	R97,937	R381	R10,267	R2,197,067	10,843	1	836	42	11,722	4,535	381	332	109	5,357
2000	R1,916,892	R283,034	R92,260	R362	R10,144	R2,302,692	10,140	1	746	45	10,932	4,225	338	367	111	5,040
2001	R1,856,326	R291,101	R102,903	R353	R10,896	R2,261,580	9,281	2	754	5	10,041	3,878	425	253	96	4,652
2002	R1,872,407	R307,455	R78,828	R372	R12,749	R2,271,811	9,106	2	R549	16	9,672	3,813	425	187	104	4,528
2003	R1,910,656	R279,300	R98,219	R371	R11,443	R2,299,988	9,255	2	579	13	9,849	3,496	282	207	98	4,082
2004	R1,922,932	R297,782	R100,249	R381	R11,165	R2,332,508	8,991	2	493	9	9,495	3,183	241	193	101	3,717
2005	R1,963,866	R320,545	R102,546	R377	R11,248	R2,398,582	9,071	2	461	10	9,543	3,051	243	189	103	3,585
2006	R1,937,791	R339,557	R55,373	R374	R11,529	R2,344,625	8,416	2	264	8	8,690	2,902	230	135	107	3,374
2007	R1,970,426	R373,268	R55,557	R376	R11,293	R2,410,920	8,002	3	265	9	8,279	2,781	236	130	112	3,259
2008	1,944,450	363,749	40,450	384	11,614	2,360,646	6,909	2	146	8	7,065	2,578	230	58	124	2,990

[1] Metric tons of carbon dioxide can be converted to metric tons of carbon equivalent by multiplying by 12/44.
[2] Anthracite, bituminous coal, subbituminous coal, lignite, waste coal, and synthetic coal.
[3] Natural gas, plus a small amount of supplemental gaseous fuels.
[4] Distillate fuel oil, residual fuel oil, petroleum coke, jet fuel, kerosene, other petroleum, and waste oil.
[5] Carbon dioxide in geothermal steam.
[6] Municipal solid waste from non-biogenic sources, and tire-derived fuel.
[7] Blast furnace gas, propane gas, and other manufactured and waste gases derived from fossil fuels; wood and wood-derived fuels; municipal solid waste, landfill gas, sludge waste, tires, agricultural byproducts, and other biomass; and chemicals, hydrogen, pitch, sulfur, and tar coal.

R=Revised.

Notes: • There are small differences in carbon dioxide emissions values between this table and Table 12.2 due to differences in the methodologies for calculating the data. • Data are for emissions from energy consumption for electricity generation and useful thermal output. • The electric power sector comprises electricity-only and combined-heat-and-power (CHP) plants within the NAICS 22 category whose primary business is to sell electricity, or electricity and heat, to the public. • See Table 12.7c for commercial and industrial CHP and electricity-only data. • See Note 2, "Classification of Power Plants Into Energy-Use Sectors," at end of Section 8. • See "Useful Thermal Output" in Glossary. • Totals may not equal sum of components due to independent rounding.

Web Page: For related information, see http://www.eia.gov/fuelelectric.html.

Sources: **Carbon Dioxide:** U.S. Energy Information Administration (EIA) estimates based on Form EIA-923, "Power Plant Operations Report" (and predecessor forms). **Sulfur Dioxide** and **Nitrogen Oxides:** EIA estimates based on Form EIA-923, "Power Plant Operations Report" (and predecessor forms). Data were adjusted by the Environmental Protection Agency's Continuous Emissions Monitoring System.